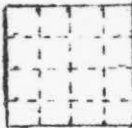


county Dunklin



sec \_\_\_\_\_ twp \_\_\_\_\_ rge \_\_\_\_\_

owner Campbell Lumber Co.

elev \_\_\_\_\_ MGS# \_\_\_\_\_ rge \_\_\_\_\_

farm \_\_\_\_\_ No. 1 TD 800? fm TD \_\_\_\_\_ shows \_\_\_\_\_

status \_\_\_\_\_ date completed 1902

remarks: Lead

00001

MP

# Subsurface Geology of the Mississippi Embayment of Southeast Missouri

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Vol. XXXVII, Second Series



1955

STATE OF MISSOURI  
DEPARTMENT OF BUSINESS AND ADMINISTRATION  
*Division of*  
GEOLOGICAL SURVEY AND WATER RESOURCES  
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Driller's log of the Campbell Lumber Company, No. 1 well. Location: SW NE sec. 3, T. 21 N., R. 9 E., Dunklin County, Missouri. Elevation: 304 feet. Completed in September 1902 by Johnson and Fleming of Memphis, Tennessee. Well No. 5 on map, Pl. 1. Mo. G. S. No. 128.

	Thickness, Feet	Depth, Feet
Yellow clay, a little darker than that on Crowleys Ridge ..	112	112
Orange sand and gravel, the sand has many white, loamy clay nodules mixed in it .....	43	155
Very hard black and brown clay or marl, with numerous very hard strata from 1 to 23 inches thick, composed largely of iron pyrites. At some point between 700 and 750 feet a bed of logs 10 or 12 feet thick was penetrated. This clay differed from any other bed struck in the bottoms in that it contained no sand strata, and not even a trace of the "gray sand" found in other wells was noted .....	785	940
Very fine black sand, with a large percentage of mica in small grains .....	20	960
The following correlations are suggested for the above record:		
Quaternary system:		
Pleistocene series:		
Recent alluvium: .....	155	155
Tertiary system:		
Eocene series:		
Wilcox group: .....	245	400
Paleocene series:		
Midway group:		
Porters Creek and Clayton formations: .....	540	940
Cretaceous system:		
Gulf series:		
McNairy (Ripley) formation: .....	20	960

NOTE: The well was reported to have 4-inch casing to 910 feet. The water rose 7 feet above the surface and the well flowed 16 gallons per minute at the surface. The water had a temperature of 72 degrees Fahrenheit. The well was purchased by the City of Campbell in 1912 and is still used without pumping, by allowing the water to flow into their reservoir. In 1914 the City drilled a new well within 50 feet of the old Lumber Company well and at approximately the same elevation. No log or samples were available from this drilling. The well was 960 feet deep, an 8-inch pipe was set to 400 feet. Below that 6-inch pipe, presumably at 920 feet, was set a 40-foot screen which was attached to the 6-inch pipe and which extended from 920 to 960 feet. The water rose 9 feet above ground level. When pumped at 150 gallons per minute the pumping level was 80 feet or a drawdown of 89 feet.

The top of the Porters Creek formation was suggested by the casing point of 400 feet. The Wilcox sands probably were caving into the hole and the Porters Creek clay would offer a good point at which to case out the caving sand. This reasoning was used in drawing the contact in the Campbell Lumber Company well.

In September of 1955 the Layne-Arkansas Company of Jonesboro, Arkansas completed well No. 3 for the City of Campbell at a depth of 935 feet in the McNairy (Ripley) formation. The static water level was 9 feet below ground surface and the yield 328 gallons per minute with a pumping level of 90 feet. The log of this well is similar to the Campbell Lumber Company well No. 1.